

specimen. Mr. Darwin took it at Maldonado, where he states that it is very common, adding that it is sometimes found in brackish water. M. D'Orbigny had also found it previously at the mouth of the Rio Plata.

2. *ATHERINA MICROLEPIDOTA*. Jen.

PLATE XVI. Fig. 1. Nat. size.

Fig. 2. *a, b*. Magnified scales.

A. gracilis; corporis altitudine partem octavam, capite quintam, longitudinis æquante: oculis mediocribus: maxillis sub-æqualibus, parum protractilibus; commissurâ primum horizontali, deinde paulo deflexâ, haud oculos attingente: dentibus velutinis, serie externâ supra subiusque fortiori: dorsali primâ omnino pone ventrales reclinatas locatâ: squamis parvis, seriebus longitudinalibus octodecim ad minimum dispositis.

D. 5—1/11; A. 1/17; C. 17, &c. P. 15; V. 1/5.

LONG. unc. 4.

FORM.—More slender and elongated than the generality of the species in this genus. Greatest depth not more than one-eighth of the entire length. Head one-fifth of the same. Greatest thickness (in the region of the gills) equalling two-thirds of the depth, or rather more. Ventral line of the body scarcely more curved than the dorsal. The upper profile falls, though very slightly, from the nape to the mouth, and the lower profile inclines upwards to meet it at about the same degree of curvature. Head broad, its breadth across the crown nearly equalling its depth. Snout horizontally rounded. Jaws nearly equal; not so protractile as in some other species: the commissure of the lips at first horizontal, but posteriorly inclining a little downward, and scarcely reaching more than half-way to the eye. In each jaw two rows of slender very distinct teeth, with traces of a third or even fourth row above, towards the middle: outer row longest and most conspicuous, consisting, in the upper jaw, of from forty-five to fifty teeth; in the lower of scarcely more than twenty-five. No teeth that can be seen on the vomer or palatines, though a slight roughness can be felt on both. Eyes of moderate size; their diameter rather more than one-fourth the length of the head; almost entirely before the middle, as well as above it: space between the eyes flat, and exceeding the diameter by about one-third: a slightly elevated line on each side of this space, but no other conspicuous sculpture. Opercle with the descending margin sloping obliquely forwards.

Crown, cheeks, and gill-covers scaly, the scales on the crown extending as far as the eyes. Scales on the body small, the number of longitudinal rows amounting to eighteen or twenty: in form nearly square, the length a little exceeding the breadth, the superficies marked with numerous very distinct concentric lines, the basal half with a fan of from four to six deeper cut striæ, the basal margin rather sinuous, and obsoletely crenate where the striæ meet it. No lateral line very distinguishable.

First dorsal small and delicate, commencing exactly at the middle point of the entire length, measuring this last to the bottom of the caudal fork, and in a line with the tips of the ventrals, these last fins being laid back. Space between the first and second dorsals a little exceeding two-thirds of the depth of the body. Length and height of the second dorsal equal

to each other, and also to the space just alluded to. From the end of the second dorsal to the commencement of the caudal is exactly one-sixth of the entire length. The posterior half of the anal nearly answers to the second dorsal, but the two fins do not terminate exactly in the same line, the dorsal extending a little the furthest. Caudal forked for about half its length. Pectorals about two-thirds the length of the head. Ventrals attached at a point beyond the extremity of the pectorals. Breadth of the silver band about one-fifth the depth of the body. COLOUR.—Not noticed in the recent state. In spirits, the back and sides above the silver band are brownish, with the contour of each scale marked out by black dots. All below the band appears to have been silvery. The band itself is not very brilliant. Both the dorsals, as well as the caudal, are dusky: anal and ventrals pale.

A second specimen does not differ from the above, excepting slightly in the fin-ray formula, which is as follows:

D. 5—1/10; A. 1/15; &c.

Habitat, Valparaiso.

This species was found by Mr. Darwin at Valparaiso in fresh water, in the month of August. It would seem to be nearly allied to the *A. laticlavia* of Cuvier and Valenciennes, brought from the same locality by M. D'Orbigny; but, judging from the short description in the "Histoire des Poissons," it is more elongated, and has the head longer in relation to the depth of the body; also has the silver band narrower. In the *A. laticlavia*, the head is said to be equal to the depth, and to be contained six times in the entire length; the breadth of the silver band to be greater than in any other species. In the *A. microlepidota*, the depth is one-eighth and the head one-sixth of the length: the silver band not broader than in the *A. argentinensis* and some others. The colouring also of the fins appears different in the two species.

3. *ATHERINA INCISA*. Jen.

PLATE XVI. Fig. 2. Nat. size.

Fig. 2. *b*. Twice nat. size.

Fig. 2. *a*. Magnified scale.

A. gracillima; corporis altitudine partem vix nonam, capite sextam, longitudinis æquante: oculis mediocribus: maxillis æqualibus, valde protractilibus; commissurâ primum horizontali, posterius deflexâ: dentibus velutinis, in maxillâ inferiore minutissimis: dorsali primâ omnino pone ventrales reclinatas locatâ: squamis mediocribus, seriebus longitudinalibus duodecim ad maximum dispositis, marginibus liberis inciso-crenatis: vittâ laterali nitidè argenteâ.

D. 5—1/8; A. 1/17; C. 17; P. 12; V. 1/5.

D. 5—1/9; A. 1/19; &c.—

D. 6—1/10; A. 1/19; &c.—

LONG. unc. 2. lin. 6.